3.1 Recreation and Scenic Quality

3.1.1 Introduction

The Fourmile Project Area is known as one of the most scenic places on the Eagle River-Florence Ranger District of the Chequamegon-Nicolet National Forest. From the abundant clear lakes to the old growth hemlock and white pine stands, this area is a highly visited and well-known tourist destination due to its scenic quality. Over the past decades, natural processes and the increasing age of current forested stands has led to an observable change in the scenic quality of the Fourmile Project Area.

The Forest Service uses the Scenery Management System to determine the relative value and importance of scenery. Scenic integrity, or the state of naturalness, is a key concept within the Scenery Management System. The Forest Plan established Scenic Integrity Objectives for the Fourmile Project Area, as well as the rest of the Forest, to guide the amount, degree, intensity, and distribution of management activities needed to achieve desired scenic conditions (LRMP, pp. 2-29 to 2-31).

Harvest treatment types vary in how they impact scenic quality. The long-term objective for all treatments proposed in High Scenic Integrity Objective areas is to enhance scenic resources, maintain forest health, and ensure public safety for the continuance of these values in the near term and for future generations.

3.9.1 Indicators

Indicator 1: Acres proposed for mechanical treatment adjacent to trails, recreation sites, waterbodies, and roads with High Scenic Integrity Objectives (SIO).
Acres of treatment adjacent to trails, recreation sites, waterbodies and roads are used to compare scenery effects among the alternatives because the qualities of recreational experiences are often dependent upon the aesthetic character of the surrounding forest. In addition, the quality of recreational experiences are also impacted by the ability of visitors to recreate undisturbed by sights, sounds and other intrusions which may occur during vegetation management activities. This indicator will describe the different effects each alternative will have on scenery adjacent to trails, recreational sites, waterbodies, and roads within the project area. This analysis will also consider the effects of the project on the recreation sites and roads with High SIOs that are directly adjacent to any type of mechanical treatment stands.

3.9.2 Analysis Parameters

Indicator 1: Acres proposed for mechanical treatment adjacent to trails, recreation sites, waterbodies, and roads with High Scenic Integrity Objectives (SIO).

The analysis area for the direct, indirect, and cumulative effects covers trails, recreation sites, waterbodies, or roads, with a High SIO, that are adjacent to mechanical treatment stands. Stands proposed for harvest or mechanical treatment specifically along the Hidden Lakes Trail are

identified in Table REC-1. Only recreation opportunities with mechanical treatment activity directly adjacent are considered because the effects on the recreation resource are expected to diminish rapidly beyond the treatment boundaries and would not likely be distinguishable from other activities occurring in the area.

Visitors to the Hidden Lakes Trail, ski trails, or other hiking trails will experience the effects of vegetation management treatments most prominently while they are hiking or skiing on trails adjacent to treatment activities. The duration in which visitors will experience the effects of harvesting activities will be much greater per unit than those who are on motorized trails while conversely they will not cover as long of a distance so the effects based upon the number of treatment stands is reduced. Stands proposed for harvest or mechanical treatment along hiking and skiing trails, other than Hidden Lakes Trail, are identified in Table REC-2.

Users of roads and motorized trails in the project area will experience the effects of vegetation management activities for a shorter duration of time per unit, but these users will travel a greater distance and the effects of vegetation management activities will be more noticeable in the number of stands encountered as opposed to the duration of time spent traveling through individual stands. Stands proposed for harvest or mechanical treatment adjacent to motorized trails are identified in Table REC-3. Stands proposed for harvest or mechanical treatment adjacent to roads are identified in Table REC-6.

Lake and river users in the project area will experience the effects of vegetation management most readily when close to shore. Duration of effects will be dependent on the water activity by the user. Users of power boats traveling at a higher rate of speed and far from shore will experience the effects of harvest activities for shorter duration at a greater distance from shore, while fisherman, whether in a motorized boat, canoe, or kayak, generally travel closer to shore at slower speeds and will experience the effects for greater duration from a closer distance. Stands proposed for harvest or mechanical treatment adjacent to lakes and rivers are identified in Table REC-5.

The time period for the direct, indirect, and cumulative effects is ten years. All of the activities are expected to be completed within ten years. This time frame is appropriate because the effects of the project on the recreation resource would occur predominantly while the timber harvest or other project work was occurring. The effects from these activities would result from seeing and hearing mechanized activity. The greatest amount of noticeable change to scenery would occur directly after harvest from logging debris, site preparation activities, and changes in vegetation composition and structure. After ten years the harvested area would be re-vegetated and logging slash would have settled. Under planting treatments are not analyzed because they will not impact the current forest-type within this ten year period.

Affected Environment

The existing condition of the Fourmile Project Area is characterized by a predominately natural landscape which has been modified in areas to support the local tourism industry. Private campgrounds and resorts can be found within the project area as well as an abundance of private

year-round and seasonal homes. There is substantial development on federal lands within the Project Area including campgrounds, swimming beaches, picnic sites, boat landings, trails, and trailhead parking areas.

The Fourmile Project Area is used year-round for both summer and winter recreational activities. This area serves as one of the premier tourist destinations on the Chequamegon-Nicolet National Forest and the State of Wisconsin alike.

Summer use is extensive and consists of camping at Forest Service and privately managed developed campgrounds, camping at dispersed Forest Service campsites, picnicking, swimming, boating, hiking, rock collecting, berry picking, fishing, road biking, mountain biking, driving for pleasure and sightseeing. Winter use is also extensive and consists of snowmobiling, cross country skiing, snow shoeing, hiking, and driving for pleasure. The area is also utilized for year-round birding, fall hunting and traveling Military Road, a National Forest designated Scenic Byway and Heritage Drive.

The Fourmile Project Area encompasses approximately 55,200 acres of which approximately 24,200 acres are upland forest managed by the United States Forest Service. The project area is also home to many area residents, resorts, and seasonal homeowners. Forest management activities on federal lands proposed within the project area may include timber harvest, hazardous fuels reduction, land leases, and recreation developments. Further project information can be found in the vegetation report in the project record or in the EA.

The Forest Service uses the nationally recognized classification system called the Recreation Opportunity Spectrum (ROS) to help describe different recreation settings, opportunities, and experiences, and to help guide management activities. The ROS classes that exist within the Fourmile Project Area are: Roaded Natural and Semi-Primitive Non-Motorized. The roaded natural class dominates the Fourmile Project area. All of the activities proposed within this project fall into areas zoned as Roaded Natural.

The roaded natural ROS class is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of man. Interactions between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident and conventional motorized use is allowed and incorporated into construction standards and design of facilities.

The semi-primitive non-motorized ROS class is characterized by a predominately natural or natural-appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present but would be subtle. Motorized recreation use is not permitted, but local roads used for other resource management may be present on a limited basis. Use of such roads is restricted to minimize impacts on recreational experience opportunities.

The Hidden Lakes Trail is located within the Fourmile Project Area. This is the most used trail within the project area and is used by visitors to the area and local residents. Other trails within

the Fourmile Project Area include snowmobile trails, ski trails, hiking trails, biking trails, equestrian trails, and hunter hiking trails.

Snowmobile trails within the project area include but are not limited to: the Forest, Oneida, and Vilas County maintained systems as well as several segments of trail under special use permit to local snowmobile clubs for access to private businesses.

Popular non-motorized trails and associated trailheads within the project area include but are not limited to: Anvil National Recreation Trail, Argonne Experimental Forest Trail, Bailey Lake Equestrian Trail, Franklin Lake Nature Trail, Hidden Lakes Trail, Nicolet North Ski Trail, Sam Campbell Memorial Trail, Scott Lake Trail, as well as the Sevenmile Trail. Many of these trail systems are managed by the Forest Service with maintenance assistance coming from a wide variety of trail partners and volunteer groups.

In addition to trails, the project area is home to many developed and dispersed camping opportunities, these opportunities include, Franklin Lake, Laurel Lake, and Sevenmile Lake Campgrounds, as well as, McKinley Lake, Three Johns Lake, Bose Lake, Four Ducks Lake, Wolf Lake, and Scott Lake dispersed campsites.

Lakes, rivers, and streams are one of the many attractions within the Fourmile project area. The largest and most heavily used lakes within the project area are Franklin Lake, Butternut Lake, Lower Ninemile Lake, and Sevenmile Lake, as well as, Fourmile, Big Fork and Laurel Lakes which connect to the larger Eagle River Chain of Lakes, the largest freshwater chain in the world. In addition to lakes, a portion of the North Branch of the Pine River is located within the project area. This section of river is designated as eligible for classification as a National Scenic River Segment.

3.9.3 Environmental Consequences

Alternative 1 – No Action

Direct and Indirect Effects

There would be no direct, indirect, or cumulative effects to scenery or recreation from the Fourmile Project under Alternative 1. No new management actions would occur; there would be no harvesting, planting, mechanical mastication or fuel reduction except for timber harvest activity on National Forest System land from previous project areas. Other ownerships would also continue to implement timber harvesting activities on land outside of the jurisdiction of the Chequamegon-Nicolet National Forest. The forest would continue to change through natural processes and the stands would be viewed as mature forest by recreational users.

This alternative would not address the over-mature forested stands and the readily observable mortality of trees within the Fourmile Project Area. Under this alternative, no actions would be taken to re-vegetate over mature stands and these stands would continue to deteriorate causing a loss in scenic quality along the roads, trails, recreation sites, and waterbodies.

Alternative 2 - Proposed Action
Direct and Indirect Effects

Effects to recreation and scenic resources proposed within Alternative 2 of the Fourmile Project area are analyzed in this section. Alternative 2 was developed with the intent of restoring native vegetation communities while addressing wildlife habit improvement, watershed restoration, hazardous fuels reduction and timber production. These objectives were designed to be implemented in a manner that would minimize the possible effects on visuals resulting from harvesting and other vegetation management treatments in the project area.

Scenic integrity indicates the degree of intactness and wholeness of the landscape character (*Landscape Aesthetics: A Handbook for Scenery Management*, page 7). The effects from these activities would be viewed as a change in in the degree of intactness of the landscape character observed by users after the harvest is complete. The greatest amount of noticeable change to scenic integrity would occur directly after harvest from logging debris, site preparation activities, and changes in vegetation composition and structure. After a period of time, vegetation management activities will create additional diversity in the treated stands including large, mature trees. One of the desired conditions for high quality scenery is diversity of species including large, mature trees.

The greatest amount of noticeable change to scenery would occur directly after harvest from logging debris, under burning, mechanical mastication and changes in vegetation composition and structure. After one year the harvesting activities would be complete and would no longer impact access to recreation sites.

Effects to Trails, Recreation Sites, Waterbodies, and Roads

Trails

Table REC-1. Stands proposed for mechanical treatment adjacent to Hidden Lakes Trail SIO)

Stand	Treatment Purpose	Stand Acres	Treated Acres w/in 200 foot High SIO buffer	Length of Trail adjacent to treatment (linear feet)	Coincident Stands/ Trails
220001	Selection – Canopy Gaps	90.8	34.58	3,597	
222001	Selection – Canopy Gaps	276.33	55.56	6,215	
224009	Selection – Canopy Gaps	21.57	1.87	111	
224017	Selection – Canopy Gaps	21.61	12.29	1,192	
020029	Selection – Canopy Gaps	34.81	8.29	1,206	
011009	Thinning – Underplant	117.48	26.18	2,705	**
Totals		562.6	138.77	15,026	

Stands proposed for harvest along the Hidden Lakes Trail will primarily utilize a selection technique to minimize impacts to visuals. Though there are 15,026 feet of trail that are adjacent to proposed treatments, actual stand boundaries may decrease the amount of trail that is impacted during implementation. Total acreage of stands which lie directly adjacent to the Hidden Lakes Trail equals 562.6 acres. Some stands are large and extend a distance from the trail, at times out of the viewshed of the trail itself. The LRMP places a buffer on high SIO trails of 200 feet, in which management activities are to be designed to leave minimal evidence. Harvest activities proposed along the Hidden Lakes Trail, and within the 200 foot high SIO buffer, equals 138.77 acres. The Hidden Lakes trail is not maintained for recreational winter use so it is expected that minimal use is occurring during this time where ones recreation experience could be audibly or visually interrupted by operating equipment. In addition, harvest under frozen ground conditions will provide additional protection to the soil and desirable flora species along the trail corridor. Impacts to the visual quality of the surrounding landscape is expected during and immediately following harvest activities, but is expected to be short lived and no longer visible after one year. Harvest in this area will remove over-mature, poor quality, and potentially hazardous trees which may pose a threat to users of the trail or the trail itself. In addition, individual tree selection will occur with respect to maintaining desirable understory flora species in stands 220001, 222001, and 224017. A resilient forest, comprised of desirable, long lived species will remain and in turn reduce required maintenance activities due to trees or limbs which have fallen across the trail. Additional signing will also be used along the Hidden Lakes Trail to inform visitors of treatment activities and to provide additional safety measures.

Table REC-2. Stands proposed for mechanical treatment adjacent to other High SIO trails

Trail	Stand	Treatment Purpose	Stand Acres	Treated Acres w/in 200 foot High SIO buffer	Length of Trail adjacent to treatment (linear feet)	Coincident Stands/ Trails
Nicolet North Ski Trail	014013	Selection – Canopy Gaps	63.74	3.84	571	
Nicolet North Ski Trail	011009	Thin – Underplant	117.48	54.82	5,858	**
Nicolet North Ski Trail	014016	Thin	14.03	9.33	1,191	
Sam Campbell Memorial Trail	180033	Selection – Canopy Gaps	17.51	1.86	145	
Sam Campbell Memorial Trail	180015	Shelterwood – Mastication – Underplant	15.52	11.73	1,174	
Sam Campbell Memorial Trail	180018	Thin	48.67	18.42	2,572	
Sam Campbell Memorial Trail	180024	Thin	17.09	9.10	1,189	
Sam Campbell Memorial Trail	180016	Thin	7.83	4.55	197	
Totals			301.87	113.65	12,897	

Selection and thinning harvest techniques will be used to maintain scenic character and minimize impacts to visual quality along the Nicolet North Ski Trail and the Sam Campbell Memorial Trail, with the exception of stand 180015. This stand, comprised primarily of Jack Pine, will be harvested through a Shelterwood technique, but designed to retain existing long lived species present within the stand. Following harvest, any slash remaining on site will be masticated through mechanical means to improve the visual quality along the trail and underplanted to aid in regeneration of the forest. Though there are 7,620 and 5,277 feet of trail that are adjacent to proposed treatments on the Nicolet North and Sam Campbell Trail, respectively, actual stand boundaries may decrease the amount of trail that is impacted during implementation. Total acreage of stands which lie directly adjacent to both trails equals 301.87 acres. Some stands are large and extend a distance from the trail, at times out of the viewshed of the trail itself. The LRMP places a buffer on high SIO trails of 200 feet, in which management activities are to be designed to leave minimal evidence. Harvest activities proposed along these trails, and within the 200 foot high SIO buffer, equals 113.65 acres. Harvest in this area will remove over-mature, poor quality, and potentially hazardous trees which may pose a threat to users of the trails or the trails themselves. A resilient forest, comprised of desirable, long lived species will remain and in turn reduce required maintenance activities due to trees or limbs which have fallen across the trails. Additional signing will also be used along these trails to inform visitors of treatment activities and to provide additional safety measures.

Table REC-3. Stands proposed for mechanical treatment adjacent to motorized trails

Trail Name	Type of Trail	Stands
Forest County Snowmobile	Snowmobile Trail	186002, 192019, 193001, 193009, 193010, 193011, 193012, 193018, 193033, 193040, 198012, 198013, 198021, 198023, 198025, 198034, 198035, 198039, 198057, 207004, 207005, 207008, 207009, 207019, 207023, 207024, 208008, 208011, 208012, 210009, 211005, 211011, 211017, 211018, 211022, 211023, 211028, 211037, 211045, 216001, 216007, 216014, 216022
Oneida County Snowmobile	Snowmobile Trail	003008, 013012, 177009, 177010, 177030, 178005, 178011, 178045, 179012, 180005, 180014, 180015, 180016, 180018, 180045, 181004, 181010, 186002, 186005, 186006, 186007, 186009, 186015, 186017, 186025, 186040, 190049, 191002
Vilas County Snowmobile	Snowmobile Trail	001001, 001003, 001004, 001006, 001009, 001030, 001032, 001044, 002001, 002002, 002011, 002012, 002013, 002014, 002018, 002025, 003006, 003008, 003015, 013012, 013017, 177010, 178005

A variety of harvesting techniques will take place in stands adjacent to motorized trails (snowmobile trails). Motorized trails are not considered high SIO, however some portions of trail run coincident with roadways or trails which are considered high SIO. In these instances, the stand will be harvested in a manner to reflect the high SIO designation to protect scenic integrity. Stands proposed for harvest along motorized trails would require that logging debris within 100 feet of the trail to be removed or crushed to a height of less than 36 inches. Portions of snowmobile trails may be required for the hauling of timber harvested in stands adjacent to the trails. Depending on the season in which the timber is hauled, there could be "dual use" of trails by harvest machinery and snowmobile recreation visitors. Recreational visitors may experience impacts from the sight and sound of machinery. In general mitigation measures will be applied to trail systems where dual use may occur and would be designed to lessen impact to recreation. For example:

- Avoiding use of system trails for skidding logs
- Minimizing crossing skid trails over system trails
- Placing safety signing to warn recreation visitors of harvest activity in the area
- Scheduling activities during low recreation-use periods
- Temporarily relocating the trail if mitigation measures cannot be made adequate

Recreation Sites

Table REC-4. Stands proposed for mechanical treatment adjacent to High SIO Recreation Sites

Recreation Site	Stand	Treatment Purpose	Stand Acres	Coincident Stands/ Trails
Franklin Lake Campground	N/A	N/A	N/A	N/A
Sevenmile Lake Campground	N/A	N/A	N/A	N/A
Laurel Lake Campground	N/A	N/A	N/A	N/A
McKinley Lake Campsite	N/A	N/A	N/A	N/A
Three Johns Lake Campsite	N/A	N/A	N/A	N/A
Four Ducks Lake Campsite	N/A	N/A	N/A	N/A
Scott Lake Campsite	N/A	N/A	N/A	N/A
Bose Lake Campsite	020030	Selection – Canopy Gaps	41.98	
Wolf Lake Campsite	208011	Thin	148.54	
Anvil Trailhead #1	N/A	N/A	N/A	N/A
Anvil Trailhead #2	002012	Selection	206.09	Military Road
Anvil Trailhead #3	N/A	N/A	N/A	N/A
Nicolet North Trailhead #1	N/A	N/A	N/A	N/A
Nicolet North Trailhead #2	015001	Selection	107.73	Babcock Road
Hidden Lakes Trailhead	220001 224017	Selection – Canopy Gaps Selection – Canopy Gaps	90.8 21.61	Hidden Lakes Trail Hidden lakes Trail
Sam Campbell Memorial Trailhead	180015 180016 181021	Shelterwood – Mastication – Underplant Thin Thin	15.52 7.83 11.16	Sam Campbell Memorial Trail Sam Campbell Memorial Trail
Bailey Lake Equestrian Trailhead	208011	Thin	148.54	N/A

Selection and thinning harvesting techniques will be used to maintain scenic character and minimize impact to visual quality near developed recreation sites. One exception is stand 180015, which is adjacent to the Sam Campbell Memorial Trailhead, and coincident with the Sam Campbell Memorial Trail (discussed above), is comprised primarily of Jack Pine and is to be treated through the use of a Shelterwood technique. Again, this harvest will be designed to retain existing long lived species present within the stand. Following harvest, any slash remaining on site will be masticated through mechanical means and underplanted to improve the scenic quality along the trail and near the trailhead. Selection and thinning harvests adjacent to

recreation facilities will be conducted in a manner to promote a diverse, long lived, forest with large diameter trees to maintain visual quality and scenic integrity.

Stands 002012 and 015001, adjacent to Anvil Trailhead #2 and Nicolet North Trailhead #2 respectively, are proposed for harvest. These stands are separated from the trailheads by high SIO roadways. Anvil Trailhead #2 lies on the eastern side of Military Road while the harvest stand lies on the west and Nicolet North #2 lies on the western side of Babcock Road while the harvest stand lies on the east side of Babcock Road. Selection harvest in both of these stands will minimize impacts to visual quality and maintain scenic integrity near these trailheads and along the two roadways.

Stands 220001 and 224017, which surround the Hidden Lakes Trailhead will be harvested through an individual tree selection technique designed to maintain the desirable understory flora species. Selection harvest in both of these stands will minimize impacts to visual quality near this trailhead.

The Bailey Lake Equestrian Trailhead lies entirely within stand 208011, a Red Pine stand, which is proposed for thinning. This stand currently has an unnatural appearance as its planted rows are readily identifiable. Harvest will be designed to result in a more natural appearing stand of randomized trees. Appropriate measures will be taken to ensure minimal evidence of harvest activity.

It is not expected this project will impact scenic character or visual quality at developed campgrounds within the project area as there are no harvest activities planned directly adjacent to any of the campgrounds. However, all campgrounds are accessed by high SIO roadways where appropriate measures will be taken to maintain visual quality as discussed below.

Many of the proposed harvest activities will take place during times of low use which will minimize the amount of disturbance to recreation users.

High SIO Lakes and Rivers

Table REC-5. Stands proposed for mechanical treatment adjacent to High SIO Lakes and Rivers

Waterbody	Stand	Treatment Purpose	Stand Acres	Coincident Stands/ Trails
North Branch Pine River	N/A	N/A	N/A	N/A
Lower Ninemile Lake	177014	Coppice	16.88	
	177028	Coppice	28.39	
	177027	Improvement	30.29	
	177020	Selection	37.30	
	177021	Selection	15.40	
	177017	Selection	26.94	
	003016	Thin	4.91	
	030017	Selection	6.94	
Laurel Lake	184001	Shelterwood	24.24	
	184004	Thin	3.5	
Woodbury Lake	198039	Coppice	14.34	
	198014	Selection	6.72	
Whitefish Lake	188001	Salvage	22.14	
Elm Lake	190013	Coppice	11.43	
	190035	Selection	25.12	
Franklin Lake	008001	Shelterwood	44.92	
	007015	Thin	28.18	
Sunfish Lake	019002	Selection	128.89	
Sevenmile Lake	221008	Restoration Thin – Masticate – Burn	25.18	
Haymeadow Creek	218017	Restoration Thin – Masticate – Burn	15.24	
Spring Lake	185033	Selection	5.7	
Wolf Lake	208011	Thin	148.54	

Stands above lie directly adjacent to high SIO waterbodies. Impacts to users of the waterbodies is expected to be minimal. State of Wisconsin Best Management Practices restrict harvest activities near waterbodies to ensure protection of the resource. Harvest design will be in a manner to limit effects to scenic integrity from water users. Appropriate buffers will be maintained to protect visual quality in stands 177014, 177028, 198039 and 190013. Stand 188001, a salvage harvest, will remove all material from 22.14 acres. This stand is over-mature aspen, many with broken tops, with dead and/or dying birch in the understory. Harvest of this stand will result in a time period of reduced visual quality and scenic integrity, however it is expected that regeneration will produce a natural appearance within 10 years.

High SIO Roads

Table REC-6. Stands proposed for mechanical treatment (Even-Aged type treatment only) adjacent to High SIO Roads

Road	Stand	Treatment Purpose	Stand Acres	Coincident Stands/ Trails
STH 70 (High-Speed)	001001	Partial Overstory-Removal	16.02	
	002001	Shelterwood	42.41	Military Road
	007007	Salvage	4.78	Camp Nicolet Lane
	016006	Salvage	12.64	Camp Nicolet Lane
STH 32 (High-Speed)	188001	Salvage	22.15	Whitefish Lake
Military Road	002001	Shelterwood	42.41	STH 70
	003006	Partial Overstory-Removal	10.90	Ninemile Road
	013012	Shelterwood	37.77	Butternut Lake Road
	181001	Shelterwood	3.46	
	178021	Salvage	33.14	Hildebrand Road
	181033	Shelterwood	1.66	
	181005	Shelterwood	12.44	
	181035	Coppice	4.33	
	181026	Clearcut	5.78	Old Military Road
Old Military Road	179012	Shelterwood	6.22	
	180015	Shelterwood	15.52	Sam Campbell Trail
	181026	Clearcut	5.78	Military Road
Butternut Lake Road	013012	Shelterwood	37.77	Military Road
Haymeadow Road	221014	Shelterwood	1.78	
	218035	Coppice	8.26	
Sheltered Valley Road	186016	Coppice	33.81	
	208015	Clearcut	7.72	
	207024	Shelterwood	14.08	Divide Road
	207023	Clearcut	3.05	
Divide Road	216023	Coppice	8.17	
	211005	Coppice	124	
	211018	Shelterwood	29.18	

Wisconsin State Trunk Highway's 32 and 70 are also within the Fourmile Project Area. These two corridors are heavily traveled by the recreating public and local residents. Due to the high speed maintained by vehicles traveling these corridor's, temporary openings of no more than 130 feet are allowable, every 500 feet, but should not occupy more than 400 feet of each mile of roadway. The amount of opening that can be seen from the road will be limited to less than 5 acres. Limiting the visible opening would minimize the impacts to scenery along these roads. In limited circumstances a harvesting technique may result in a temporary opening greater than 130 feet in length, more than 400 feet per mile, and create a visible opening of more than 5 acres from the roadway. Stands 007007, 016006, and 188001 fall within this category as the first two, situated along State Trunk Highway 70, propose a salvage harvest which would result in a continuous temporary opening of 1,100 feet and an opening size of 17.5 acres. Additionally, the proposed salvage harvest in stand 188001, along State Trunk Highway 32, would create a continuous temporary opening of 1,165 feet and an opening size of 22.14 acres. However, since the stands are 76, 86, and 87 years old, respectively, they are already showing signs of high mortality and will become temporary openings on their own in the near future. Appropriate buffers will be maintained to protect visual quality in stands 001001 and 002001.

Within the Fourmile Project Area, roads such as Military Road, Old Military Road, Butternut Lake Road, Knaap Road, Haymeadow Road, Sheltered Valley Road, Scott Lake Road and Divide Road are used by the recreating public for travel to and from recreation sites, and for driving for pleasure recreational opportunities, as well as by homeowners who travel the roads to access their residence or seasonal homes. Harvest stands along these road corridors would be designed to minimize the evidence of forest management activities by limiting temporary openings a minimum distance of 200 feet from the roads edge. Selective harvesting techniques may still be used within 200 feet of the roads edge, however the harvest would be designed to minimize the evidence of forest management. In limited circumstances a harvesting technique may result in a temporary opening within the 200 foot buffer, however this will only be the case when mitigating safety concerns or the stands health and/or natural life cycle is at a point which would result in a natural opening on the landscape. Stands 178021, 207023, and 181026 fall within this category as the first two of these stands are designated as salvage harvest to remove dead or dying timber and the third stand is a relatively small (5.78 acre), 89 year old stand of balsam fir, all three stands will become temporary openings on their own in the near future. It is expected the above six openings will be visible for a period of about 10 years, or until the regeneration averages more than 12 feet in height or crown closure is more than 20 percent. Appropriate buffers will be maintained to protect visual quality in stands 181035, 181026, 218035, 186016, 208015, 216023, 211005, and 212018.

All other stands proposed for harvest immediately adjacent to High SIO corridors are scheduled for harvest techniques considered un-even aged or natural appearing and will be designed to minimize impacts to visual quality and maintain scenic integrity while promoting long lived, desirable tree species. The effects of harvest within these stands are expected to be noticeable for one year following treatment. After one year slash will have settled and the understory will have returned, providing a natural forested landscape.

Cumulative Effects of Alternative 2

The analysis of cumulative effects includes lands on all ownership within the Fourmile Project Area. The vegetation report in the project record contains the past, present, and reasonably foreseeable future actions in or adjacent to the Fourmile Project Area. Harvest could occur on other ownership within the Fourmile Project Area. The Bureau of Commissioners of Public Lands, has land both within and adjacent to the project area that are proposed for harvest. Harvest on other public or privately owned land could have similar impacts to recreation including scenic impacts and dual use.

Management activities associated with Alternative 2 have the potential to combine with completed past projects, current projects, or foreseeable future projects. In the short-term, visitors traveling in the project area would observe an increase in temporary openings and a loss of mature vegetation. Over the longer-term, visitors would see a greater amount of younger trees in the analysis area as the harvested stands begin to re-vegetate and these younger age classes would be found in larger patches of forest. A long-range effect of the project would be an increase in the amount of vigorous trees in the Fourmile Project Area along with a reduction in over-mature, dying trees. This will lead to an increase in the aesthetic quality of the Fourmile Project Area as over-mature trees are replaced with healthier and more vigorous long-lived species.

Because of the mitigation measures incorporated into the prescription for stands within the Fourmile Project Area, impacts to scenic resources from management of federal lands, added to the impacts from development of private lands, is not expected to change the scenic character of the trails, recreation sites, waterbodies and roads, and will lead to an increase in aesthetic quality through the project area. In the first ten years post-treatment, openings in the forest created by management activity would be noticeable. Beyond ten years, these openings would re-vegetate through natural processes or by intentional planting and reseeding. Management of these stands may continue within or beyond ten years to release the longer lived species as they become established.

Wilderness

There are no wilderness or roadless areas within the project area; however, the Blackjack Springs Wilderness borders the northern boundary of the project area and the Headwaters Wilderness borders the eastern boundary of the project area.

Blackjack Springs Wilderness

The Blackjack Springs Wilderness is relatively small in that it is less than 6,000 acres in size. It is bordered by homes along the southeastern and southwestern boundary, in addition to well-traveled roads on three sides, including 1.5 miles of State Trunk Highway 70, a highway which has an annual average daily traffic count of 1,900 vehicles. According to the 1991 Blackjack Springs Wilderness Implementation Schedule, most of this area was disturbed by logging and fire in the early 1900's and logging in the 1960's. Roads, plantations, and timber harvesting disqualified the area from consideration in the Roadless Area Review and Evaluation (RARE II).

There are no harvest activities proposed immediately adjacent to the boundary of Blackjack Springs Wilderness, however there are stands proposed for harvest south of STH 70, which borders the wilderness. The boundary for Blackjack Wilderness in all areas where a road is involved is described as 33 feet from the centerline of that roadway. In this instance, STH 70 has been relocated to the south from the roadways original location, the location which the boundary was derived. This results in a greater distance from the wilderness boundary to the existing roadway centerline of today and thus, proposed harvest activities.

Headwaters Wilderness

The Headwaters Wilderness, although larger than Blackjack Springs, is still relatively small at just over 22,000 acres, as the average size of the 765 wilderness areas in the United States is 142,000 acres. Its west central boundary is bordered by approximately 1.5 miles of general forest area, and the remainder is bordered by 25.5 miles of well travel roads, 23.3 miles of which is open to all-terrain and utility-terrain vehicle use. The Headwaters Wilderness is also trisected by two well-traveled roads, totaling 11.2 miles, resulting in three individual units, Shelp Lake Unit, Kimball Creek Unit and the Headwaters of the Pine Unit. Of these two roads, Scott Lake Road, 6.10 miles in length, allows the use of all-terrain and utility-terrain vehicles in addition to travel by full sized vehicles and recreational motorcycles. According to the 1991 Headwaters Wilderness Implementation Schedule, most of this area was disturbed by logging and fire in the late 1800's and early 1900's. Portions of abandoned railroad grades and logging roads are visible, and remnants of a developed recreation area are evident.

There are five stands with proposed harvest activities immediately adjacent to the boundary of Headwaters Wilderness, in addition to stands proposed for harvest bordering roads which form the boundary of the wilderness area. The boundary for Headwaters Wilderness in all areas where a road is involved is described as 100 feet from the centerline of that roadway. This distance, in addition to the additional 25 feet of right-of-way extending from the centerline of each bordering roadway, results in a distance of 125 feet from the wilderness boundary to the nearest potential

harvest activity. In most areas, 75 of the 125 feet (between wilderness boundary and edge of road right-of-way), is dense forest which provides a visual screen of the roadway and potential harvest activities from the wilderness.

The five stands which are located immediately adjacent to the boundary of Headwaters Wilderness are 207019, 207023, 198047, 198046, and 198045, totaling 54.42 acres and bordering the wilderness for 3,266 feet. Two of these stands 207023 and 198047 are proposed to be cleared. Of these two stands, the first is a planned salvage harvest of declining balsam fir, the second is a clear-cut to regenerate an aspen stand. Clearing adjacent to the wilderness boundary in the area of these two stands would total 1,113 feet. It is expected these harvests will be visible for a period of about 10 years, or until the regeneration averages more than 12 feet in height or crown closure is more than 20 percent. There is no direction in the Forest Plan regarding activities adjacent to wilderness boundaries.

All other harvest activities are buffered by roadways, such as State Trunk Highway 70 which separates the Fourmile project area from Blackjack Springs Wilderness and FR 2176 (Divide Road), FR 2183 (Scott Lake Road) which buffer the Headwaters Wilderness area from the project area. All roads which act as boundaries of wilderness areas are already considered high SIO roads and stands which are proposed for even-aged treatments are referenced above in table REC-6. All other stands proposed for harvest immediately adjacent to high SIO corridors are scheduled for harvest techniques considered un-even aged or natural appearing and will be designed to minimize impacts to visual quality and maintain scenic integrity while promoting long lived, desirable tree species. The effects of harvest within these stands are expected to be noticeable for one year following treatment. After one year slash will have settled and the understory will have returned, providing a natural forested landscape.

Due to this distance from the wilderness boundaries, existing vegetative screening, and existing transportation infrastructure, visual impact in areas where the wilderness is delineated by a roadway, is expected to be minimal.

Noise from harvest activities may impact users of the Blackjack and Headwaters Wilderness areas. However, this noise would be of a shorter duration than that coming from firewood cutters, which can occur almost year-round and in any location surrounding the wilderness areas. In addition, average annual daily traffic counts on STH 70 in this area total 1,900 vehicles per day and traffic on Divide Road and Scott Lake Road is estimated at 35 vehicles per day, this traffic count does not include use by all-terrain and utility terrain vehicles which are more prevalent on the weekends, a time users of wilderness are most likely to be in the area.

The Whisker Lake Wilderness is also located on the Eagle River/Florence Ranger District, however, its closest boundary is 22.3 miles from the Fourmile project area, and the Sylvania Wilderness, Ottawa National Forest, lies 17.3 miles northwest from the northwestern corner of the Fourmile project area. There is much development in-between, including the towns of Eagle River, Conover and Land O' Lakes, as well as, State Trunk Highways 70, 17 and 45.